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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,176	07/10/2003	Swee Mok	CM013661D01	2152
22917	7590	11/08/2006	EXAMINER	
MOTOROLA, INC. 1303 EAST ALGONQUIN ROAD IL01/3RD SCHAUMBURG, IL 60196			APANIUS, MICHAEL	
			ART UNIT	PAPER NUMBER
			3736	

DATE MAILED: 11/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/622,176	Applicant(s) MOK ET AL.	
	Examiner Michael Apanius	Art Unit 3736	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-23 is/are pending in the application.
- 4a) Of the above claim(s) 10-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 7/10/2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>20030710</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Invention III, claims 16-23, in the reply filed on 10/11/2006 is acknowledged. Claims 10-15 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Invention, there being no allowable generic or linking claim.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: "37" in figure 6.
3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: "microcontroller/Digital Signal Processor (DSP) 58" (page 15, line 13).
4. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of

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any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

5. The disclosure is objected to because of the following informalities: at page 8, line 19, it appears that "it's" should be --its--. Appropriate correction is required.

Claim Objections

6. Claims 16-23 are objected to because of the following informalities:
- a. At claim 16, it appears that the claim should be clarified to show that the "means for organizing..." and the "buffer" are elements of each of said wireless electrodes.
 - b. At claim 20, line 3, it appears that "distance W" should simply be --distance--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:
- The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
8. Claims 16-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9. At claim 16, line 11, "said encoded identification number" appears to lack proper antecedent basis in the claim.
10. At claim 17, the recitations of "said sensor" appear to lack proper antecedent basis in the claim.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claim 16 is rejected under 35 U.S.C. 102(b) as being anticipated by Besson et al. (US 5,862,803). Besson discloses a wireless bioelectric potential measuring system, comprising a base unit (1) supplying measured signals to a monitor (8a); a plurality of wireless electrodes (2a-2f) for acquiring measured signals from a patient, each of said electrodes comprising an electronics module (44) converting measured signals to digital form (column 21, lines 23-25) and an RF transceiver (30, 31, 36a) for transmitting RF wireless data corresponding to said measured signals to said base unit and receiving RF wireless commands from said base unit; each of said wireless electrodes further comprising a means for encoding unique identification information (column 8, lines 6-24) associated with said wireless electrodes; a means for organizing said digital form of said measured signals into packets (column 8, lines 29-31) for appending said encoded identification information to said packets; and a buffer (33a and/or column 8, line 29) for

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storing digital data containing said encoded identification number prior to transmission by said RF transceiver to said base unit. Although Besson does not expressly disclose using the system to measure and transmit EMG signals, the system is deemed to be fully capable of being used with EMG signals because Besson discloses that the system can be used with bioelectric potentials. EMG measures muscle bioelectric potentials.

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Besson et al. (US 5,862,803) in view of Segalowitz (US 5,168,874).

15. Besson discloses two programmable identification codes associated with each wireless electrode (column 8, lines 6-24) but does not expressly disclose manually operated switches on the electrodes.

16. Segalowitz teaches manually operated multiple-position switches on wireless electrodes for the purpose of permitting one electrode to be usable in various body locations (column 7, last paragraph; column 8, 1st paragraph).

17. Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to have added manually operated switches as taught by

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Segalowitz to the electrodes of Besson in order to permit one electrode to be usable in various body locations.

18. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Besson et al. (US 5,862,803) in view of DeLuca et al. (US 6,238,338).

19. Besson does not expressly disclose the configuration of the wireless electrodes set forth in claim 18.

20. DeLuca teaches an adhesive strip (41 in figure 3b) having a lower surface for placement against the skin of a patient and an upper surface; a pair of conductive electrodes (51) applied to said adhesive strip; a sensor substrate (28, 29) applied to said upper surface of said adhesive strip, said sensor substrate carrying first and second conductive contact pads (inherently required for the sensor substrate to receive the signals detected by the electrodes) placed in registry with said pair of conductive electrodes such that said contact pads are in electrical contact with said conductive electrodes; wherein an electronics module (figure 3a) is applied to said sensor substrate and in electrical contact with said contact pads. The design of DeLuca is for allowing the circuit board to be interchangeable with multiple substrates to efficiently monitor various biosignals (column 1, lines 59-67).

21. Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to have used the wireless electrode design of DeLuca in the system of Besson in order to allow the circuit board to be interchangeable with multiple substrates to efficiently monitor various biosignals.

22. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Besson et al. (US 5,862,803) as modified by DeLuca et al. (US 6,238,338), as applied to claim 18 above, and further in view of Matsumura et al. (US 6,161,036).

23. Besson as modified by DeLuca does not expressly disclose that the adhesive strip comprises a flexible, double sided adhesive tape.

24. Matsumura teaches that a flexible, double sided adhesive tape is well known in the art for the purpose of strongly fixing an electrode to a living body (column 7, lines 47-53).

25. Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to have used a flexible, double sided adhesive tape as is known in the art and as taught by Matsumura in the system of Besson as modified by DeLuca in order to strongly fix the electrodes to a living body.

26. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Besson et al. (US 5,862,803) as modified by DeLuca et al. (US 6,238,338), as applied to claim 18 above, and further in view of Schaefer et al. (US 5,203,330).

27. Besson as modified by DeLuca does not expressly disclose a flexible protective tape applied to a lower surface of the adhesive strip.

28. Schaefer teaches a flexible protective tape applied to an adhesive for the purpose of protecting the electrodes until use (column 3, lines 54-59).

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29. Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to have used a protective tape as taught by Schaefer on the electrodes of Besson as modified by DeLuca in order to protect the electrodes until use.

30. Claims 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Besson et al. (US 5,862,803) as modified by DeLuca et al. (US 6,238,338), as applied to claim 18 above, and further in view of Segalowitz (US 5,511,553).

31. Besson as modified by DeLuca discloses multiple electrodes, one of which can be considered a reference voltage electrode. However, Besson as modified by DeLuca does not expressly disclose that one of the electrodes is positioned at the end of a flexible strip attached to the sensor substrate.

32. Segalowitz teaches positioning a reference electrode (column 27, lines 1-3) at the end of a flexible strip (336b-336e in figure 18) comprising an adhesive (column 27, lines 4-6) for the purpose of allowing the electrode to be positioned at various distances from a main portion (column 26, line 35- column 27, line 3).

33. Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to have positioned a reference voltage electrode at the end of a flexible strip as taught by Segalowitz in the system of Besson as modified by DeLuca in order to allow the reference electrode to be positioned at various distances from a main portion.

Allowable Subject Matter

34. Claim 20 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

35. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record does not appear to teach or fairly suggest a pair of electrode strips of conductive material wrapped around an adhesive strip and separated from each other by a distance as set forth in claim 20.

Conclusion

36. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Miyata et al. (US 6,026,321) discloses an apparatus and system for measuring electrical potential variations in human body. Boesen (US 6,470,893) discloses a wireless biopotential sensing device and method.


37. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Apanius whose telephone number is (571) 272-5537. The examiner can normally be reached on Mon-Fri 8am-4:30pm.

38. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on (571) 272-4726. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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39. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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